

THE NORTH AMERICAN SPECIES OF THE GENUS
MEROMACRUS WITH ONE NEW SPECIES.

(Diptera, Syrphidae.)

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This generic name was proposed by Rondani in 1848. Macquart proposed *Plagiocera* some six years earlier but his name is preoccupied in the Coleoptera. Loew's *Pteroptila* proposed in 1865 is a synonym also.

The genus as at present constituted includes sixteen new world species, half of which have been taken in North America, although well toward the South. One species has been taken as far north as Cincinnati, Ohio, but this is considered quite unusual. P. Sack recently has given a good treatment of the genus in Band 43, pages 257-271, *Zoologische Jahrbucher*, 1920.

KEY TO NORTH AMERICAN SPECIES.

1. Legs nearly wholly black or dark brown 2
 Legs pale brown or yellowish, coxae and femora often partly
 or wholly black 3
2. Legs black, robust species *cinctus*
 Legs dark brown, rather small species *obscurus* n. sp.
3. All the femora more or less black 4
 Anterior and middle femora not black 5
4. Thorax with a mid-dorsal yellow stripe. All femora marked
 with yellow and black *opulentus*
 Thorax without a mid-dorsal yellow stripe. Femora black,
 middle and posterior ones yellow apically *zonatus*
5. Dorsum of the thorax with four yellow spots along the trans-
 verse suture *decorus*
 Dorsum of the thorax with the yellow along the transverse
 suture interrupted at the mid-dorsum only 6
6. Hind femora in large part black, species mostly composed of
 large rather robust specimens, sometimes rather small how-
 ever *cruciger*
 Hind femora not black, species of medium size 7
7. Abdomen black, at least basally; fuscous marking of anterior
 border of wing reaching from near base to apex... *pratorum*
 Abdomen reddish brown, fuscous marking of anterior margin
 of wing on apical half only *ruficrus*

Meromacrus cinctus Drury.—Known from all other species of the genus by its entirely black legs. It is a large, robust species with black thorax and mostly red abdomen marked by spots and bands of bright yellow hair. Some specimens of each sex have a band of bright yellow hair at the base of the third abdominal segment and some do not. Known from Jamaica, Porto Rico and Santo Domingo. Recent check lists give *pinguis* Fabricius and *ania* Walker as synonyms.

Meromacrus cruciger Wiedemann.—A rather large, somewhat elongate species, body almost entirely black in color with yellow markings, legs rather pale reddish yellow, except the hind femora which are in large part black. Wings largely hyaline, apical half of the anterior margin rather conspicuously fuscous. Widely distributed in southern United States. Known from Ga., Fla., N. Car., Arizona, Miss., Texas, Oklahoma, Kentucky, S. Ohio. Specimens are at hand from Cuba, Vera Cruz, Tobasco and British Honduras. The name *crucigera* used by Williston and *milesformis* Macquart are synonyms. Some consider *acuta* Fabricius as the same in which case this name should have priority.

Meromacrus decorus Loew.—One of the smallest species of its genus. The only one known where the yellow along the transverse suture of the thorax is broken up into four distinct spots, and the same color in front of the scutellum into three spots. The dorsum of the thorax therefore has nine yellow spots. Known only from the island of Cuba.

Meromacrus obscurus n. sp. Male.—Total length of body 11 mm., length of wing $9\frac{1}{2}$ mm., width of head a little over 3 mm. A dark colored species with no conspicuous markings, eyes bare, contiguous for a short distance, vertical triangle longer than wide, ocelli prominent, arranged in a nearly equilateral triangle; frontal triangle largely black in ground color, rather long yellow pilose and very thinly gray pollinose, more conspicuously so near the eyes; face of nearly equal width from antennae to oral margin, shining black on middle from oral margin half way to antennae, sides yellowish gray pollinose and yellow pilose. Antenna rather short, brown in color, third segment oval, dark on apical half, pale basally, arista pale yellowish. Thorax black in ground color, before the scutellum with a transverse band of yellow pile, widest at mid-dorsum where it sends forward a very narrow line of yellow pile to anterior thoracic margin; on each side of the thorax a line of yellow pile follows the transverse

suture from outer margin to two-thirds the distance to mid-dorsal line where it unites at an acute angle with a similar line which passes forward parallel to the mid-dorsal line to anterior thoracic margin; each humerus gray pollinose; scutellum brown with short sparse pile of the same color; wide anterior margin of the wing brownish-fuscous which color is less pronounced toward base of wing, and much of the costal cell is nearly hyaline; legs mostly rather dark brown, each hind femora especially has a rather well defined patch of pale brown on each side on apical third including the entire apex but only the inferior part of the femur further basad; a conspicuous patch of silvery hair outwardly on each hind coxa. The exact coloration of the legs is difficult to describe, for suggestions of paler color are apparent in irregular areas at various places here and there, thus breaking up the dark brown which predominates. Abdomen dorsally dark brown and in most part sparsely pale yellow pilose, first segment gray pilose laterally and narrowly on posterior margin, third and fourth segments with a narrow basal pale yellow band of nearly uniform width throughout. Hypopygium just slightly lighter brown than the preceding segments. Holotype male collected by myself at Los Amates, Guatemala, between January 16 and 20, 1905. This species and *opulentus* are the only North American species of the genus having a mid-dorsal thoracic stripe. The two are easily separated however by the color of the legs and by size.

Meromacrus opulentus Bigot.—Known only from Cuba. The thorax has a narrow lead-colored mid-dorsal stripe. Legs reddish-yellow, anterior femora with a broad irregular black ring, middle femora black beneath, posterior femora broadly blackish basally. This insect has some affinities with *obscurus* but the legs are very differently colored and the size is larger.

Meromacrus pratorum Fabricius.—A dark nearly black species near cruciger, but of smaller average size and with uniform pale brown femora throughout. The yellow thoracic markings are narrower than in the other North American species of the genus except *obscurus*. Known from Porto Rico, St. Vincent and from several places in South America.

Meromacrus ruficrus Wiedemann.—Male: Abdomen and legs reddish brown in general coloration. First abdominal segment largely black with a prominent yellow pilose transverse marking. A divided yellow band at the base of the third segment. Narrow

posterior margins of abdominal segments two, three and four dorsally yellow. Usual anterior margins of the wing darker in color, fuscous on apical half. Known from Cuba and Florida.

Meromacrus zonatus Loew.—Thorax black with white markings. The front femora are all black, middle femora black at base, posterior femora black on basal two-thirds. Williston gives a translation of Loew's original description on page 182 of his Synopsis and adds to it on page 87 of Volume III, Diptera, Biologia Centrali Americana. Known from Guerrero, Mexico, and from other Mexican localities.

A NEW SPECIES OF THE GENUS BRACHYCISTUS FOX (Hymenoptera, Aculeata).

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The species described herein is referable to the subgenus *Brachycistellus* Baker, this being the fourth known from this country, all of which occur in the southwestern States.

The type specimen is deposited in the collection of the United States National Museum. Paratypes are in the collection of the U. S. Biological Survey.

Brachycistus (Brachycistellus) inermis sp. n.

Male.—Pitchy black, usually paler on sutures of thorax and apices of abdominal segments; antennae, mandibles, clypeus, palpi, and legs testaceous yellow. Stigma pale.

Structurally similar to *paupercula* Bradley, but the clypeus has no central tubercle, being transversely concave in middle, with the lower margin curved outward. The head is otherwise similar to that of *paupercula*, the ocelli being large and the distance between the hind pair a little greater than the space between either of these and the margin of eye. Venation as in *paupercula*. Length, 3.5–4 mm.

Type and five paratypes, Higley, Arizona, June 15–18, 1917 (E. G. Holt).